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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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Corrigendum

PROJECT PROPOSALS: PAKISTAN

This corrigendum is issued to replace pages 2, 6, 7 and 12 of document UNEP/OzL.Pro/ExCom/23/42.

PROJECT EVALUATION SHEET **PAKISTAN**

SECTOR: FOAMS ODS use in sector (1995): 270 ODP tonnes

Sub-sector cost-effectiveness thresholds: Integral Skin US \$16.86/kg
General US \$9.53/kg
Rigid US \$7.83/kg

Project Title:

- (a) SPEL - Conversion to CFC-free technology in the manufacture of integral skin polyurethane foam
- (b) Diamond Group - Conversion to CFC-free technology in the manufacture of polyurethane foam (Flexible Slabstock, Flexible Molded, Rigid Foam)
- (c) UMBRELLA - Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware)

Project Data	Integral Skin	General	Rigid
	SPEL	Diamond	Umbrella
ODS phase-out (ODP tonnes)	13.6	64.1	239.6
Proposed project duration (months)	24	36	24
Incremental capital cost (US \$)	136,125	415,250	2,073,500
- including contingency (%)	10	10	10
Incremental operational cost (US \$)	24,500	148,089	437,800
Total project cost (US \$)	160,625	563,339	2,511,300
Local ownership (%)	100	100	
Export component (%)			
Amount requested (US \$) {Original}	173,000	839,100	1,637,400
{Revised}	160,625	563,339	1,600,000
Cost effectiveness (US \$/kg)	11.81	8.79	6.68
National Coordinating Agency	Ministry of Environment, Local Government & Rural Development		
Implementing Agency	World Bank		
Technical review completed?	Yes	Yes	Yes

Secretariat's Recommendations:			
Amount recommended (US \$)	160,625	563,339	1,600,000
Project impact (ODP tonnes)	13.6	64.1	239.6
Cost effectiveness (US \$/kg)	11.81	8.79	6.68
Implementing Agency support cost (US \$)	20,881	73,235	208,000
Total cost to Multilateral Fund (US \$)	181,506	636,574	1,808,000

Impact of Project on 1999 Freeze

6. The projects under preparation will phase out 318 tonnes of CFC and will effectively contribute to a reversal of the growth trend in CFC consumption in the sector and positively contribute to Pakistan's efforts to meet the 1999 consumption freeze.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS**COMMENTS**

1. The three projects SPEL, Diamond and the umbrella project are still under discussion between the Secretariat and the World Bank and the outcome will be communicated to the Sub-Committee on Project Review.

2. With regard to the flexible molded foams production at SPEL and Diamond, based on expert advice to the Secretariat the following cost items are being discussed with the World Bank:

- change of molds following conversion
- provision of heating ovens
- replacement of low pressure with high pressure machines.
- the eligibility of low CFC-11 consumption for conversion to LCD technology.

3. The Diamond Group project proposes to convert the current flexible slabstock production in Karachi to LCD technology at a capital cost of US \$535,000. The total CFC consumption at the plant is only 5 tonnes (cost effectiveness of US \$107/kg). The decision to implement LCD technology was taken to meet the requirements of a very fine cell structure required for textile industry customers. While the final project cost of the LCD component will be influenced by the results of on-going review of LCD project guidelines, the Secretariat questioned the eligibility of the request based on the cost effectiveness value.

RECOMMENDATION(S)

1. The Fund Secretariat concluded its discussions with UNDP and UNIDO on all issues outlined in the Secretariat's comments, and recommends approval of the projects with the funding levels and associated support costs indicated in the table below.

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
(a) SPEL - Conversion to CFC-free technology in the manufacture of integral skin polyurethane foam	160,625	20,881	World Bank
(b) Diamond Group - Conversion to CFC-free technology in the manufacture of polyurethane foam (Flexible Slabstock, Flexible Molded, Rigid Foam)	563,339	73,235	World Bank
(c) UMBRELLA - Conversion to CFC-free technology in the manufacture of rigid polyurethane foam (thermoware)	1,600,000	208,000	World Bank

PROJECT EVALUATION SHEET

PAKISTAN

SECTOR: REFRIGERATION ODS use in sector (1993): 673 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial 15.21 US \$/kg
Domestic 13.76 US \$/kg

Project Titles:

- (a) Phasing out ODS at the freezer factory of Hirra Farooq's (Pvt) Ltd.
- (b) Conversion to CFC-free technology in the manufacture of polyurethane foam at Cool industries
- (c) Conversion to CFC-free technology in the manufacture of polyurethane foam at Singer
- (d) Conversion to CFC-free technology in the manufacture of polyurethane foam at Kold Kraft

Project Data	Domestic Refrigeration			Commercial
	Hirra Farooq's	Cool industries	Singer	Kold Kraft
ODS phase-out (ODP tonnes)	31.2	117.6	17.8	11.5
Proposed project duration (months)	18	36	24	24
Incremental capital cost (US \$)	454,080	310,000	643,101	206,250
- including contingency (%)	10	10	10	10
Incremental operational cost (US \$)	67,725	531,750	43,209	24,000
Total project cost (US \$)	521,805	841,750	686,312	230,250
Local ownership (%)	100	100	30	100
Export component (%)				
Amount requested (US \$) {Original}	544,350	1,295,375	245,763	175,000
{Revised}	521,805	841,750	205,893	
Cost effectiveness (US \$/kg)	16.72	7.16	7.52	15.21
National Coordinating Agency	Ministry of Environment, Local Government & Rural Development			
Implementing Agency	UNIDO	World Bank		
Technical review completed?	Yes	Yes		

<i>Secretariat's Recommendations:</i>				
Amount recommended (US \$)	521,580	841,750	205,893	175,000
Project impact (ODP tonnes)	31.2	117.6	17.8	11.5
Cost effectiveness (US \$/kg)	11.34	7.16	7.52	15.21
Implementing Agency support cost (US \$)	67,805	109,427	26,766	22,750
Total cost to Multilateral Fund (US \$)	589,385	951,177	232,659	197,750

4. The Secretariat and the World Bank are still discussing the choice of technology as proposed in the project and the level of eligible capital costs. The Sub-Committee on Project Review will be informed accordingly.

(c) Conversion to CFC-free technology in the manufacture of polyurethane foam at Singer

1. The Secretariat discussed with the World Bank capital cost requested in the proposal. Several adjustments in the capital cost were proposed by the Secretariat regarding storage facility, safety cost, cost of charging board, leak detectors and vacuum pumps. The proposed adjustments reflect the existing baseline of the enterprise and the standard costs for equipment concerned.

2. The Secretariat and the World Bank are still discussing the level of eligible capital costs. The Sub-Committee on Project Review will be informed accordingly.

(d) Conversion to CFC-free technology in the manufacture of polyurethane foam at Kold Kraft

1. The technologies chosen by the company are proven. Explanations of the use of HCFC interim technology in the foam operations are provided.

2. The requested costs are justified.

RECOMMENDATION

1. The Fund Secretariat concluded its discussions with UNIDO and the World Bank on all the issues outlined in the Secretariat's comments, and recommends approval of the projects with funding level and associated support costs as indicated in the table below:

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
(a) Phasing out ODS at the freezer factory of Hirra Farooq's (Pvt) Ltd.	521,580	67,805	UNIDO
(b) Conversion to CFC-free technology in the manufacture of polyurethane foam at Cool industries	841,750	109,427	World Bank
(c) Conversion to CFC-free technology in the manufacture of polyurethane foam at Singer	205,893	26,766	World Bank
(d) Conversion to CFC-free technology in the manufacture of polyurethane foam at Kold Kraft	175,000	22,750	World Bank